

Claims

The following is claimed:

1. A method for managing an agricultural product, the method comprising:
 - storing a raw material in a storage container;
 - physically processing the stored raw material in the storage container to obtain a processed material based on the raw material;
 - recording link data for associating the raw material with the processed material across any transformation between the raw material and the processed material; and
 - facilitating at least one of retrieval and data processing of the recorded link data for management of at least one of an agricultural product and a storage container associated with the agricultural product.
2. The method according to claim 1 wherein the processing comprises blending the stored raw material to obtain a target trait value of the stored raw material.
3. The method according to claim 1 wherein the processing comprises blending multiple stored raw materials together to form the processed material.
4. The method according to claim 1 wherein the processing comprises coordinating movements of the raw material, the processed material, blended material, and any derivatives of the raw material, the processed material, and the blended material among storage containers.
5. The method according to claim 1 wherein the storage container is associated with a storage identifier, each raw material associated with a corresponding storage identifier having material attributes, the material attributes including one or more of the following: quantity of the stored raw material, quantity of the processed material,

protein content, total weight, moisture, foreign matter, defects, color, material identifier, material variety identifier, and mixture.

6. The method according to claim 1 further comprising:

associating a lot of an agricultural product with a corresponding particular storage container;

assigning at least one trace element to the lot based on one or more previous agricultural products stored in the particular storage container;

informing a downstream recipient of the lot of the at least one assigned trace element in the lot.

7. The method according to claim 6 further comprising:

limiting the assigned trace element to the previous agricultural products stored in the particular storage container prior to a last cleaning of the particular storage container.

8. The method according to claim 1 wherein the physical processing comprises blending two or more raw materials to obtain the processed material compliant with an attribute selected from the following group: protein content, baking strength, sprouted grain, broken kernels, grade, test weight per bushel, damaged kernels, heat damage percent, total damage percent, foreign material percent, percent shrunken and broken kernels, and defects percent.

9. The method according to claim 1 wherein the physical processing comprises blending two or more raw materials to obtain a processed material compliant with a governmental grade for wheat selected from the following group: United States number 1, United States number 2, United States number 3, United States number

4, United States number 5, United States sample grade, French E class, French class 1, French class 2, French class 3(a) and French class 3(b).

10. The method according to claim 1 further comprising:

verifying an estimated quantity of the raw material in the particular storage container;

adjusting the estimated quantity of the raw material to conform to an actual measured quantity of the raw material by adjusting at least one of a lot quantity of a particular lot of the raw material and a flow type associated with the particular storage container.

11. A system for managing an agricultural product, the system comprising:

a transaction manager for physically processing a stored raw material in a storage container to obtain a processed material based on the raw material;

a data storage manager for recording link data for associating the raw material with the processed material across any transformation between the raw material and the processed material; and

a user interface for facilitating at least one of retrieval and data processing of the recorded link data for management of at least one of an agricultural product and the storage container associated with the agricultural product.

12. The system according to claim 11 wherein the transaction manager comprises a processing module for blending the stored raw material to obtain a target trait value of the stored raw material.

13. The system according to claim 11 wherein the transaction manager comprises a processing module for blending multiple stored raw materials together to form the

processed material.

14. The system according to claim 11 further comprising a receiving module for coordinating movements of raw material to or from the storage container.

15. The system according to claim 11 further comprising a shipping module for coordinating movements of the raw material, processed material, blended material, and any derivatives of the raw material, the processed material, and the blended material from or between the storage containers.

16. The system according to claim 11 wherein the storage container is associated with a storage identifier, each raw material associated with a storage identifier having material attributes, the material attributes including one or more of the following: quantity of stored raw material, a quantity of the processed material, protein content, total weight, moisture, foreign matter, defects, color, material identifier, material variety identifier, and mixture.

17. The system according to claim 11 further comprising:

an inventory monitor for associating a lot of an agricultural product with a corresponding particular storage container, the inventory monitor assigning one or more trace elements to the lot based on at least one previous agricultural product stored in the particular storage container;

the user interface informing a downstream recipient of the lot of the assigned trace elements.

18. The system according to claim 17 wherein the inventory monitor limits the assigned one or more trace elements to the previous agricultural products stored in the particular storage container prior to the last cleaning of the particular storage

container.

19. The system according to claim 11 further comprising:

an inventory monitor for monitoring a status of at least one of the material and the storage container;

a remote monitor communicating a status of the at least one of the material and the storage container to the inventory monitor.

20. The system according to claim 11 further comprising a controller for controlling at least one of the material and the storage container associated with the material, a processing module of the transaction manager communicating with the controller.